

Abstract of the Disclosure

An objective lens for two or more types of optical discs of different standards is provided. A surface of the objective lens is formed with a diffracting structure, and has an inner area including an optical axis and an outer area. The outer area is configured such that part of a first beam (having a first wavelength for a first optical disc of relatively lower data density) passed through the zones will be substantially in phase (within a prescribed phase difference) with part of the first beam that passed through the inner area. A convergence angle θ of part of the first beam incident on the outermost part of the inner area measured after emerging from the objective lens and a design numerical aperture NA_{ref} for the first optical disc satisfy:

$$0.9 < \sin\theta/NA_{ref} < 1.0,$$

while the effective NA is substantially equal to the design numerical aperture NA_{ref} .